

Water-Data Report 2013

**08403800 LAKE AVALON NEAR CARLSBAD, NM**

Upper Pecos Basin  
Upper Pecos-Black Subbasin

LOCATION.--Lat 32°29'28.92", long 104°15'08.45" referenced to North American Datum of 1983, Eddy County, NM, Hydrologic Unit 13060011, on headwall at outlet gate of dam on Pecos River, 3.3 mi north of Carlsbad, and at mile 467.2.

DRAINAGE AREA.--18,070 mi<sup>2</sup>, approximately (contributing area).

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--January 1939 to September 1965 (monthend gage heights and contents), October 1965 to current year. Monthend gage heights January 1919 to December 1938 in files of Pecos River Commission.

REVISED RECORDS.--WSP 898: 1939.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 3,157.0 ft above NGVD of 1929 (levels by Bureau of Reclamation).

COOPERATION.--Records provided by Carlsbad Irrigation District.

REMARKS.--Lake is formed by Avalon Dam, an earthfill structure. The original Eddy (Avalon) Dam was completed and storage began in 1891. The dam was destroyed by the flood of Aug. 3, 1893; repaired immediately. The dam was destroyed again Oct. 2, 1904; construction of present dam commenced on June 1, 1906, and was 88 percent complete June 30, 1907. Capacity (based on Feb. 1996 survey) 4,470 acre-ft between gage heights 0.0 (sill of outlet gates) and 20.4 ft (crest of spillway 2). No dead storage. No storage allocated to flood control. New capacity table put into use Jan. 1, 1997. Figures given herein represent usable contents. Water is used by Carlsbad Irrigation District.

EXTREMES OUTSIDE PERIOD OF RECORD.--(SINCE 1938): Maximum contents, 11,000 acre-ft, May 22, 1941, gage height, 25.0 ft; no storage at times when natural flow is passing through reservoir.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 5,700 acre-ft, Sept. 13; Minimum contents, 853 acre-ft, Aug. 21.

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**RESERVOIR STORAGE, ACRE FEET**  
**WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013**  
**DAILY OBSERVATION AT 0800 HOURS**

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1,520	1,790	2,200	2,460	2,860	3,110	3,190	1,780	1,450	1,650	2,380	1,060
2	1,520	1,860	2,200	2,460	2,860	3,110	3,190	1,780	1,450	1,650	2,380	1,060
3	1,520	1,860	2,200	2,460	2,860	3,110	3,190	1,780	1,450	1,650	2,380	1,140
4	1,520	1,860	2,200	2,460	2,860	3,110	3,190	1,860	1,450	1,650	2,380	1,140
5	1,520	1,860	2,200	2,540	2,920	3,110	3,190	1,860	1,450	1,650	2,380	1,140
6	1,520	1,860	2,200	2,540	2,940	3,110	3,190	1,860	1,450	1,650	2,380	1,140
7	1,520	1,920	2,200	2,620	2,940	3,110	3,190	1,860	1,450	1,650	2,380	1,140
8	1,590	1,920	2,200	2,620	2,940	3,110	3,190	1,930	1,450	1,650	2,380	1,200
9	1,590	1,920	2,280	2,620	2,940	3,110	3,190	1,930	1,450	1,720	2,380	1,200
10	1,590	1,920	2,280	2,620	2,940	3,190	3,190	1,930	1,450	1,720	2,380	1,200
11	1,590	1,920	2,280	2,620	2,940	3,190	3,270	2,160	1,510	1,720	2,380	1,260
12	1,660	1,920	2,280	2,700	2,940	3,190	3,270	2,220	1,510	1,720	2,300	5,400
13	1,660	1,990	2,280	2,700	2,940	3,110	3,270	2,220	1,510	1,720	1,930	5,700
14	1,660	1,990	2,280	2,700	2,940	3,110	3,270	2,220	1,510	1,720	1,510	4,900
15	1,660	1,990	2,280	2,700	2,940	3,110	3,270	2,220	1,510	1,720	1,030	4,610
16	1,660	1,990	2,350	2,700	3,020	3,110	2,860	2,220	1,390	1,720	973	4,510
17	1,660	1,990	2,350	2,700	3,020	3,110	2,380	2,220	1,140	1,720	1,200	4,510
18	1,660	2,060	2,350	2,780	3,020	3,110	1,710	2,220	1,030	1,850	1,380	4,510
19	1,720	2,060	2,350	2,780	3,020	3,110	1,510	2,300	973	2,380	1,200	4,420
20	1,720	2,060	2,350	2,780	3,020	3,110	1,510	2,300	1,200	2,460	918	4,420
21	1,720	2,060	2,350	2,780	3,020	3,110	1,580	2,300	1,450	2,460	853	4,420
22	1,720	2,060	2,350	2,780	3,020	3,110	1,510	2,300	1,510	2,460	1,030	5,290
23	1,720	2,060	2,350	2,780	3,110	3,110	1,450	2,070	1,580	2,460	1,030	5,290
24	1,720	2,060	2,420	2,780	3,110	3,110	1,450	1,080	1,580	2,460	1,030	5,290
25	1,790	2,130	2,420	2,860	3,110	3,110	1,450	1,080	1,580	2,380	1,030	5,290
26	1,790	2,130	2,420	2,860	3,110	3,110	1,380	1,200	1,580	2,380	1,030	5,290
27	1,790	2,130	2,420	2,860	3,110	3,110	1,580	1,320	1,580	2,380	1,030	5,290
28	1,790	2,130	2,420	2,860	3,110	3,190	1,720	1,320	1,580	2,380	1,030	5,290
29	1,790	2,130	2,420	2,860	---	3,190	1,780	1,380	1,580	2,380	1,030	5,290
30	1,790	2,130	2,490	2,860	---	3,190	1,780	1,380	1,580	2,380	1,080	5,290
31	1,790	---	2,490	2,860	---	3,190	---	1,450	---	2,380	1,080	---
<b>Max</b>	1,790	2,130	2,490	2,860	3,110	3,190	3,270	2,300	1,580	2,460	2,380	5,700
<b>Min</b>	1,520	1,790	2,200	2,460	2,860	3,110	1,380	1,080	973	1,650	853	1,060
<b>Change in contents, in acre-feet</b>	270	340	360	370	250	80	-1,410	-330	130	800	-1,300	4,210

	Calendar Year 2012	Water Year 2013
<b>Max</b>	2,870	5,700
<b>Min</b>	966	853

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